Docket No.: SCHIERLING-7 Appl. No.: 10/599,968

AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1. (Canceled)

2. (Previously presented) A method for detecting a degree of pollution of an operational converter, comprising the steps of:

determining a surface conductance of a converter part that is exposed to ambient air; and

determining a comparison value representing a comparison of the surface conductance with a predetermined limit value of the surface conductance, whereby the comparison value thus determined provides a measure of the degree of pollution of the converter.

3.-6. (Canceled)

7. (Currently amended) [[The]] A method of claim 1 for detecting a degree of pollution of an operational converter, comprising the steps of:

determining an operating state of a converter component that is exposed to the ambient air of in the converter;

determining a corresponding operating state of the converter component in an unpolluted state; and

determining a comparison value representing a comparison of the two operating states, whereby the comparison value thus determined provides a measure of the degree of pollution of the converter,

wherein the operating state of the converter component is determined using a resistance of the converter component, said method further comprising the step of displaying the resistance of the converter component.

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8. (Previously presented) A device for detecting a degree of pollution of an operational converter, said device comprising;

a thermal model for estimating a temperature of a heat sink of the converter;

a temperature sensor for determining the temperature of the heat sink; and an evaluation circuit connected to the thermal model and to the temperature sensor for comparing the estimated temperature and the determined temperature.

9. (Previously presented) A device for detecting a degree of pollution of an operational converter having a voltage supply, said device comprising:

an evaluation circuit; and

a resistor bridge circuit having an input side connected to the voltage supply of the converter, two resistors in said resistor bridge circuit that are diagonally opposite to each other being adapted to change their resistance by heating as a result of operation and the other two resistors in said resistor bridge circuit being adapted to maintain their resistance, said resistor bridge circuit having an output connected to said evaluation circuit.

10. (Previously presented) A device for detecting a degree of pollution of an operational converter having a voltage supply, said device comprising:

two conductor tracks extending close to each other, one of said conductor tracks being connected to a discharge resistor, the other conductor track of said conductor tracks being connected to the voltage supply of the converter; and

a voltage follower connected in parallel with said discharge resistor.

11. (Previously presented) The device of claim 9, wherein at least one resistor of the two resistors that are adapted to change their resistance as a result of operation includes a plurality of electrical resistors connected in series, plurality of resistors being arranged in a distributed manner in the converter. Docket No.: SCHIERLING-7 Appl. No.: 10/599,968

12. (Previously presented) The method of claim 2, further comprising the step of storing the comparison value.

- 13. (Previously presented) The method of claim 2, further comprising the step of generating a warning signal when a first predetermined comparison value is exceeded.
- 14. (Previously presented) The method of claim 2, further comprising the step of generating a warning message when a second predetermined comparison value is exceeded, said second predetermined comparison value being greater than said first predetermined comparison value.
- 15. (Previously presented) The method of claim 2, wherein the operating state of the converter component is determined using a resistance of the converter component, said method further comprising the step of displaying the resistance of the converter component.